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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,695

08/16/2006

Takao Fukunaga

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EXAMINER

LESLIE, MICHAEL S

ART UNIT

PAPER NUMBER

3745

MAIL DATE

DELIVERY MODE

04/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,695	Applicant(s) FUKUNAGA ET AL.	
	Examiner MICHAEL LESLIE	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10, 14 and 19 is/are rejected.
- 7) ☒ Claim(s) 4-9, 11-13, 15-18 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claims 1, 4-9, and 11-20 are objected to because of the following informalities:

Claims 1, 4-9, and 11-20 contain several reference characters both with and without parentheses leading to ambiguity of their meaning. In some cases the reference characters are accompanied by a description (e.g. "a length Si ...") and should be enclosed in parentheses, while reference characters in a recitation such as "flattening (L/D1)" should not be enclosed in parentheses due to their definition of a claim limitation (i.e. "D1 is an outer diameter ...").

Claim 20, Line 1, "claim 17" should be --claim 19--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 10, 14, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Abe et al (6447246).

Abe et al discloses a torque converter to transmit torque by fluid, including a front cover being configured to receive torque, an impeller forming a fluid chamber with the front cover and including an impeller shell and a plurality of impeller blades (11) fixed to the impeller shell, a turbine being located facing the impeller within the fluid chamber, including a turbine shell and a

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plurality of turbine blades (12) fixed to the turbine shell, and a stator (13) being located between the impeller and the turbine to adjust the flow of the fluid from the turbine to the impeller, the impeller, the turbine, and the stator constituting a torus, flattening ($2L/2R$) being less than or equal to 0.18 (0.165-0.244; Col. 4, Lines 26-44) in the torus, wherein $2R$ is an outer diameter and $2L$ is an axial direction length, a surface of the impeller shell on which the impeller blades are fixed having an impeller straight portion (Fig. 2) showing a straight line in a cross section, a surface of the turbine shell on which the turbine blades are fixed having a turbine straight portion (Fig. 2) showing a straight line in a cross section. Wherein the impeller straight portion is formed at a radially intermediate portion of the impeller shell, the turbine straight portion is formed at a radially intermediate portion of the turbine shell, the impeller straight portion and the turbine straight portion extend perpendicularly to a rotational axis of the torque converter, and a length of the impeller straight portion is more than or equivalent with a length of the turbine straight portion.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 5241820, 6575276, 6807808, and 6880330 each disclose a flattened torque converter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL LESLIE whose telephone number is (571)272-4819. The examiner can normally be reached on M-F 8:00am - 4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML
April 10, 2008

**/Michael Leslie/
Primary Examiner, Art Unit 3745**